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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,402	01/04/2006	Hiroshi Iwamoto	10873.1835USWO	4555
53148 7590 01/09/2008 HAMRE, SCHUMANN, MUELLER & LARSON P.C. P.O. BOX 2902-0902 MINNEAPOLIS, MN 55402			EXAMINER BAKER, DAVID S	
			ART UNIT 2884	PAPER NUMBER
			MAIL DATE 01/09/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

917

## Office Action Summary

Application No.

10/563,402

Applicant(s)

IWAMOTO ET AL.

Examiner

David S. Baker

Art Unit

2884

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-12,14 and 18-22 is/are rejected.
- 7) ☒ Claim(s) 2-4,13,15,23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 01/04/06.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 5-12, 14, 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwamoto (US 2004/0069947 A1).

Regarding claim 1, Iwamoto discloses a plastic identifying apparatus for identifying a kind of a plastic in an object to be identified comprising: an identifying and detecting portion for identifying the kind of the plastic included in the object to be identified (P:0005-0026); and a toppling system for toppling the object to be identified by applying an external force to the object to be identified in order to change an identification face of the object to be identified facing the identifying and detecting portion (P:0005-0026).

Regarding claim 5, Iwamoto discloses that the identifying and detecting portion allows an infrared light with a predetermined wave number to enter the object to be identified and detects an intensity of the infrared light that is totally-reflected by the object to be identified (P:0007).

Regarding claim 6, Iwamoto discloses a pressing portion for pressing the object to be identified so as to bring the object to be identified into close contact with the identifying and detecting portion (P:0008).

Regarding claim 7, Iwamoto discloses a holding portion for holding the object to be identified placed in the identifying and detecting portion (P:0012).

Regarding claim 8, Iwamoto discloses a first cleaning portion for cleaning a face serving as the identification face of the object to be identified after being toppled (P:0016).

Regarding claim 9, Iwamoto discloses a holding portion for holding the object to be identified placed in the identifying and detecting portion (P:0054-0057), and the first cleaning portion is provided in a region in the holding portion facing the face serving as the identification face of the object to be identified after being toppled (P:0054-0057).

Regarding claim 10, Iwamoto discloses a second cleaning portion for cleaning the identifying and detecting portion (P:0009).

Regarding claim 11, Iwamoto discloses that the second cleaning portion is provided in the toppling system (P:0009).

Regarding claim 12, Iwamoto discloses an object-to-be-identified positioning portion used for positioning at a time of placing the object to be identified in the identifying and detecting portion (P:0073).

Regarding claim 14, Iwamoto discloses a plastic identifying method for identifying a kind of a plastic in an object to be identified, comprising: (a) identifying the kind of the plastic included in the object to be identified placed such that a first face of the object to be identified serves as an identification face, using the first face (P:0005-0026, P:0052); (b) toppling the object to be identified so as to change the identification face of the object to be identified facing an

identifying and detecting portion from the first face to a second face by applying an external force to the object to be identified (P:0005-0026, P:0052); (c) identifying the kind of the plastic included in the object to be identified using the second face of the object to be identified (P:0005-0026, P:0052); and (d) determining the kind of the plastic included in the object to be identified using an identification result obtained by using the first face and an identification result obtained by using the second face (P:0005-0026, P:0052).

Regarding claim 18, Iwamoto discloses that in the (a) identifying and the (c) identifying, a plastic identifying apparatus comprising the identifying and detecting portion for identifying the kind of the plastic included in the object to be identified is used, the (a) identifying is performed in a state where the first face of the object to be identified is in close contact with the identifying and detecting portion (P:0005-0026, P:0052), and the (c) identifying is performed in a state where the second face of the object to be identified is in close contact with the identifying and detecting portion (P:0005-0026, P:0052).

Regarding claim 19, Iwamoto discloses that in the (a) identifying and the (c) identifying, the kind of the plastic in the object to be identified is identified by allowing an infrared light with a predetermined wave number to enter the object to be identified and detecting an intensity of the infrared light that is totally-reflected by the object to be identified (P:0005-0026).

Regarding claim 20, Iwamoto discloses that the (b) toppling is started in a state where a third face of the object to be identified is supported (P:0005-0026, P:0052).

Regarding claim 21, Iwamoto discloses cleaning the second face of the object to be identified between the (a) identifying and the (b) toppling (P:0005-0026, P:0052).

Regarding claim 22, Iwamoto discloses that in the (b) toppling, the identifying and detecting portion is cleaned (P:0005-0026, P:0052).

*Allowable Subject Matter*

3. Claims 2-4, 13, 15-17, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 2, the prior art of record does not disclose or make obvious, along with the other claimed limitations, a plastic identifying apparatus comprising: namely, wherein the toppling system topples the object to be identified by applying a pushing force to at least a part of an end region of the second face on a side of the first face and at least a part of an end region of a third face, which is opposed to the second face, on a side opposite to the first face, thereby allowing the second face to face the identifying and detecting portion as the identification face.

Regarding claims 3-4, the balance of claims is found to contain allowable subject matter due to their dependence upon a claim that already contains allowable subject matter.

Regarding claim 13, the prior art of record does not disclose or make obvious, along with the other claimed limitations, a plastic identifying apparatus comprising: namely, a displacement preventing portion for preventing a displacement of the object to be identified from the identifying and detecting portion by restricting a position of one end portion of the object to be identified when the object to be identified is toppled.

Regarding claim 15, the prior art of record does not disclose or make obvious, along with the other claimed limitations, a plastic identifying method comprising: namely, wherein the object to be identified is toppled by applying a pushing force to at least a part of an end region in the second face on a side of the first face and at least a part of an end region in a third face, which is opposed to the second face, on a side opposite to the first face, thus placing the object to be identified such that the second face serves as the identification face.

Regarding claims 16-17, the balance of claims is found to contain allowable subject matter due to their dependence upon a claim that already contains allowable subject matter.

Regarding claim 23, the prior art of record does not disclose or make obvious, along with the other claimed limitations, a plastic identifying method comprising: namely, wherein an identification operation is stopped and the object to be identified is discharged if the object to be identified is judged not to be placed at an accurate position with respect to the identifying and detecting portion.

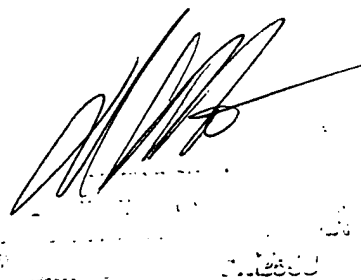
*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Baker whose telephone number is (571) 272-6003. The examiner can normally be reached on MTWRF 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DSB



Handwritten signature of David S. Baker, with a faint circular stamp below it.